REMARKS

Claims 1-21, 31-40, 50, and 53-57 are pending in this application after this Amendment. In light of the amendments and remarks made herein, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections.

Applicants are submitting this Second Supplemental Reply in order to further clarify their position with respect to the teachings of the *Hecht* reference. As previously noted, *Hecht* provides for a multi-level selection method and apparatus using context identification for embedded data graphical user interfaces. Specifically, *Hecht*, at col. 5, lines 33 through col. 6, line 12 teaches as follows:

> The best practice for identifying the location of a given glyph with respect to the transverse or Y-axis of such an address space is to capture a sufficiently large area of the address space to determine the phase of the sequence that is encoded on the line containing the given glyph relative to the phases of the sequences encoded on the next preceding and next following lines of the address space. The two-way relative phase analysis that is enabled by this three sequence phase determination effectively discriminates between odd and even numbered lines in the address space, even if one or more of the sequences has "rolled over" in the address space. As will be appreciated, the principal implication of this two-way relative phase analysis technique is that it requires that capture of a sufficiently large number of the bit encodings from each of the three sequences to phase lock on to each of those sequences. Typically, pattern matching (or sliding window correlation) process is employed to find the phase locked state in a maximal length bit sequence. For cases where the width, W, of the address space equals the length, L, of the maximal bit length sequence in question, this correlation process requires a capture of at least N bits sequence, where N

> is the unique subsequence bit length of the maximal bit length sequence to establish phase lock (preferably, the correlation process given approximately 2N bits or more to establish phase lock with a desirable higher degree of confidence in its correctness). Note the maximal PN sequence ordinal position can be correlated normally even in the neighborhood of rollover at the end of the code (the code is cyclic). If a truncated PN sequence or the like is used, a somewhat larger typical capture region (no more than twice the extent along the linear code direction) would be needed to assure ambiguous address determination. If any one of a family of sequences may be used, more glyphs in the sequence may be needed to distinguish allowed sequences.
>
> **As shown in dashed lines in FIG. 7, phase roll over can be avoided by reducing the effective address space by a factor of two, so that all phase shifts are in the same absolute direction** (i.e., same sign sense). That, in turn, permits a one-way relative phase analysis to be used for determining the relative transverse positions (i.e., the positioning relative to the Y-axis) of the lines of such an address space glyphs on the odd and even numbered lines encode different maximal bit length sequences (such as at "X" and "Y" in FIGS. 2, and U and V in FIGS. 7 and 8) because the sequences themselves can then be used to distinguish between the odd and even numbered lines. (emphasis added)

Hecht provides for an address space for embedding multiple instances of one or two maximal bit length sequences. However, *Hecht* teaches that the larger the address space, the more difficult is it to decipher the position and it is more likely that phase roll over can occur. As such, the *arguendo* position-coding pattern of *Hecht* does not teach or suggest a global information management system comprising a position-coding pattern wherein the total set of positions coded by the position-coding pattern specifies unique positions on an area greater than the area of any practically

useable base. *Hecht* does not teach or suggest a position-coding pattern that specifies unique positions in large address spaces.

Based upon the above, it is respectfully submitted that *Hecht* fails to render the claims obvious.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Catherine M. Voisinet (Reg. No. 52,327) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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providing a product with at least one subset of the position-coding pattern; dividing the position-coding pattern into regions, said position-coding pattern representing a large number of positions coded by the position-coding pattern, wherein the total set of positions coded by the position-coding pattern specifies unique positions on an area greater than the area of any practically useable base; and associating each region with a rule for how the information which contains coordinates for at least one position within this region is to be managed.

51.-52. (Canceled).

53. (Previously Presented) An information management system comprising:

at least one base;

a position-coding pattern which codes absolute coordinates of a total set of positions, wherein one or more subsets of the position-coding pattern is provided on the base, and wherein the total set of positions coded by the position-coding pattern specifies unique positions on an area greater than any practically useable base; and

processing circuitry which provides management of information recorded from the base and represented by the absolute coordinates

of at least one position coded by the one or more subsets provided on the base.

54. (Currently Amended) The information management system of ~~claim 55~~claim 53, wherein the position-coding pattern codes positions corresponding to a surface of 4.6 million km^2.

55. (Previously Presented) The information management system of claim 1, wherein two or more non-continuous subsets of the position-coding pattern are provided on the base.

56. (Previously Presented) The information management system of claim 53, wherein the position-coding pattern codes a continuous set of positions in a two-dimensional coordinate system.

57. (Previously Presented) The information management system of claim 57, wherein the position-coding pattern codes a plurality of pairs of absolute coordinates.